

# SCIENCE AND EDUCATION A NEW DIMENSION

## PEDAGOGY AND PSYCHOLOGY



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## Digital Images as Media and Study Aids in Teaching Foreign Languages to Future Primary School Teachers

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**Abstract.** The paper deals with the aspects of foreign language teaching and learning in an innovative manner. It considers images as one of the most popular visual aids and focuses on the use of digital images. The author defines digital images as the element of new media tools (computers, tablets, smart phones) and demonstrates how they can be used with SAMR model. Some activities and digital resources to be used to form future teachers' foreign language competence are introduced in the paper.

**Keywords:** new media tools, media competence, image, foreign language competence, future primary school teacher, SAMR model

**Introduction.** The processes of globalization and informatization of society oblige a contemporary individual to possess the skills that make him competitive, cooperative, creative and communicative. To prepare a real professional is the task of every higher educational establishment. They must put the 21st century skills in the center of learning. These skills are united into four groups: *content knowledge and 21st century themes* – mastery of fundamental subjects; *learning and innovation skills* – creativity, critical thinking, communication and collaboration; *information, media and technology skills* – ability to create, evaluate, and effectively utilize information, media, and technology; *life and career skills* – flexibility and adaptability, initiative and self-direction, social and cross-cultural skills, productivity and accountability, leadership and responsibility [3]. One of the key subjects in Ukraine is a foreign language, in particular English, knowledge of which cannot be overstated because it opens employment opportunities not only in the country but in many other states and markets as well. It makes possible to contact people from all over the world. Those who know English get an access to an incredible amount of information in different sorts of media such as websites, blogs, social networks etc., that promotes life-long learning. We cannot deny using this information in private and professional fields of each individual, particularly a primary school teacher. In pedagogical higher establishments lectures of foreign languages realize that they need to integrate forming of future primary school teachers' foreign language competence and development of the 21st century skills. It requires the search of innovative methods and tools. Media tools can promote the achievement of these objectives as they are popular with young people today.

**Analysis of recent research and publications** has shown that the problems of future primary school teachers' foreign language competence has been studied by V. Barkasi, O. Bigych, J. Harmer, N. Kosharna, O. Kotenko, Y. Rudnik, M. Sidun, O. Skorobahata, A. Solomakha, N. Yatseniuk etc. Authors pay much attention to the forming of foreign languages as a tool for communication and offer traditional and innovative approaches to the process of their teaching, in particular gaining knowledge of vocabulary and grammar that are stated by curriculum and syllabus; acquiring speaking, listening, writing, reading skills; developing a citizen of multicultural, information society. Because of rapid growth of information in mass media scientists, lecturers

and teachers emphasize the importance of issues of media use. V. Chychuk, O. Georgiadi, I. Gurinenko, J. Harmer, S. Its, A. Kostenko, I. Sahnevych etc. have highlighted that formation of media competence is essential, because a contemporary person needs to know how to get access to information, how to analyse it and how to create own messages. Images have been considered by L. Albano, T. Elmore, M. Sadiq etc. But still we may claim that the use of digital images in teaching foreign languages to future primary school teachers has not been explored a lot yet.

So, **the objective of the article** is to methodize the use of media tools, in particular digital images. Tasks which come from the objective are to define the term *digital image*; to identify a digital image as teaching tool in a foreign language teaching process; what activities and digital resources can be used to form future teachers' foreign language competence.

**Materials and methods.** On the basis of scientific and methodological literature we planned to include such methods as analysis, synthesis, comparison, generalization, systematization and modeling into our research in order to investigate and justify the benefits of digital images in teaching foreign languages to primary school teachers.

**Results and discussion.** Educators use a variety of materials as teaching aids in educational process. Some changes in the use of teaching aids and tools have happened in contemporary classrooms. For example, blackboards have been substituted by Smart Boards, paper pictures – by digital images, CDs – by podcasts, magazines and newspapers – by issues in web portals or blogs, television – by vlogs or video podcasts etc. Thus, foreign language educators learn to implement new media tools to form foreign language competence of their students.

New media are defined as technical tools which serve to store, copy, create and share information; which is transmitted with articles, stories, pictures, photos, charts, graphs, diagrams and video images, podcasts etc. and provide opportunities for development of individual's media competence. Computers, smart phones, tablets and the Internet refer to new media tools, they are paid much attention to in teaching different subjects, particularly a foreign language. The question of merging the objectives of forming foreign language and media competences has arisen in teaching a foreign language for some ways how to do it effectively through their subject.

We would like to systematize the use of images in teaching and learning a foreign language to future primary school teachers. It is necessary to mention that a *picture* is a visual media that is very helpful in introducing objects and motivating to learn a foreign language. It can be either print or digital. A word *picture* is synonymous to words *photograph* and *image*. A digital picture is called an *image* and is defined as a visual representation of something (person, scene, nature etc.). It is a picture that has been created, copied and stored or messaged and stored in electronic form. It can be embedded into the web sites and blogs, accompanying texts or without them. Common image file formats online include JPEG, GIF, GIF89a, PNG, SVG, TIFF [7].

We agree with Dr. T. Elmore who claims that images are the oldest form of curriculum and still the preferred method for learning today and the use of images is considerable as the majority of people are visual learners; pictures stick and the information is remembered much better; they accelerate understanding and engage the right brain and emotions; pictures make a viewer want to express and respond; visuals tell stories in our imagination; pictures enable to store information in memory [2]. Consequently, educators need to adapt the use of images in innovative manner with the help of media tools.

Some pictures can communicate more than what words can convey. In this sense, educator have a very good tool by way of pictures to communicate unusual messages.

The appropriateness of the images being utilized is crucial to enforce the effectiveness of this practice. Images can be used to promote positive learning experiences for students when used in ways that are consistent with the cognitive theory of visual learning. Therefore, pictures have an added advantage over text, as dual coding takes place in the memory, hence it is easier for the learner to make cross connections between the two different codes and later retrieve information [6].

Pictures help increase motivation, focus attention, enlarge processing clarification of text content, dual-code theory, decrease interference decay, process support for the type of information and serve as mental models.

Teacher and blogger L. Albano claims that pictures are essential when it comes to engaging students who are learning a new language at any level. They can be successful study aids during lessons, and they can act as useful prompts to help students when they are practising speaking [1].

J. Harmer has written that pictures can be used as drills, communication games, understanding, ornamentations, prediction, discussion, creative writing [4, p.178]

Taking into consideration all above researchers' opinions we would like to say that the use of images in teaching a foreign language to future primary school teacher is really considerable because images are characterized as available, free, visual aid, easily stored, helpful for various types of activities such as drilling, comparing, predicting, interacting, presenting material, creating, talking, enacting, understanding, reflecting, giving feed back. Images motivate future educators, encourage their imagination and develop their critical thinking. They are effective in acquiring foreign speaking, writing, reading and listening skills. They can be a stimulus for writing and discussing as an images are being read and talked about.

Use of images in teaching a foreign language to future primary school teachers may set them an example of innovative teaching and learning.

As it has already been mentioned images are included into the content of media tools so they can be used to make the class innovative and creative because they are downloadable and uploadable, can be stored easily and long a while. They make content of media "fresh" and up-to-date that helps present and future educators keep up with recent information. Though media and their importance in educational sphere are much spoken about, there are still some obstacles and misunderstanding which interfere the use of media tools in teaching, a foreign language particular.

In this paper we want to clarify the issue and give some practical advice how to form future primary school teachers' foreign language and media competences through images with the help of media tools. In our opinion **3WH (Why? What? When? How?) question set** can explain the sequence of actions in this process and we have a desire to note some ideas to disclose every question word.

**Why?** (setting objectives) The answer to this question reveals understanding of practical objectives a lecturer wants to achieve in class, which skills he wants his students to acquire with the help of a chosen picture.

**What?** (choice of teaching aid and media tool) A lecturer chooses any sort of picture (an image, a collage, a picture, a photo) according to the requirement. Despite the fact that the choice and the use of pictures is very much a matter of personal taste, while preparing for a foreign language class some *requirements for the picture* should be taken into consideration by a lecturer so that the pictures will be linguistically useful.

- The pictures should be appropriate to the objective of the class.

- The pictures should correspond students' age, background, experience, education, emotional and intellectual level, professional direction.

- The pictures should satisfy the content of the subject (themes, lexics, grammar structures, speech patterns etc.).

- The pictures should be visible and big enough so that all the students can see the necessary details [4, p.179]

A very important phase is the choice of a media tool (computer, tablet, smart phone or the Internet) and media resource.

A SAMR model can be of a great help in it. It creates a clear picture of customizing a media tool in educational process. SAMR model was developed by Dr. Ruben Puentedura [5] and the acronym means: *Substitution* (technology acts as a direct tool substitute with no functional change, it is used instead of paper, pen or pencil), *Augmentation* (technology acts as a direct tool substitute with functional improvements), *Modification* (technology allows for significant task redesign), *Redefinition* (technology allows creation new tasks previously inconceivable).

We want to note some examples of methods which can be given by a lecturer at each level of the use of a media tool in a foreign language class.

#### *Substitution*

Look at the picture and describe it; Look at the picture and answer the questions; Look at the picture and put questions; Watch the photo story and think of the plot; Label the items (objects or actions) in the picture; Think

of a caption for the picture; Look at the pictures and predict the plot of the story; Order the pictures; Odd one picture out, Compare the pictures; Contrast the pictures; Make up a story; Group the pictures; Look at the picture, listen to the story and find out what is wrong; Act out what you see in the picture; Brainstorm the ideas etc.

#### Augmentation

Listen and circle what you hear in shared document; Listen and mark the order of objects you see in the picture in shared document; Complete the chain of photos in shared document; Create thought bubbles for characters in photos etc.

#### Modification

Consider a picture, think of description and record it, Comment on the photo in a blog; Create a picture story; Paste a picture on a joint board and write down questions to it etc.

#### Redefinition

Create a photo story, embed it in your social network (wiki space etc.) and provide feedback; Create a presentation, embed it in your social network (wiki space etc.) and provide feed back; Create a Board Game and explain groupmates the rules using screencasting; Create the game to drill some grammar structure; Create a story using your own time line etc.

**When?** (analysis of procedure) Answering this question a lecturer realizes what part of the class the use of the picture suits the most.

**How?** (choice of method) A lecturer becomes aware of organizational forms to be used. Pair and group work stimulate collaboration, interactivity. These types of forms are the best for sharing opinions, problem solving, evaluate the problem critically. As the world is changing day by day so are the methods as the modern curriculum requires conceptual elaborations [6]. Conventional methods which can be used with pictures use are *Picture Dictation*, *Revealed Picture*, *Image Detective*, *Compare and Contrast*, *If I could speak* and a lot others can be regenerated into unconventional ones with the help of media tools. Some examples may demonstrate how to follow 3WH question set and transform some of conventional methods through SAMR cycle in teaching a foreign language to future primary school teachers within the discipline "Practical English Course".

#### Example 1

**Topic** Puppet theatre and performances for children

**Why?** To lead into the topic of the discussion, revise the vocabulary and develop speaking skills by expressing own opinions

**What?** A collage of several images from any picture search (Flickr Images, Google Images, Yandex Images, Bing Images, Yahoo Image Search, Ask Images Search, PicSearch, Exalead, Pixsy, Photobucket) that is created with an online photo editor resource *Avatan*

**When?** At the beginning of the class to brainstorm the vocabulary and predict the topic of the class

**How?** The collage is projected on the Smart Board to be visible for every one in the class

#### Example 2

**Topic** Comparison of theatre and cinema contribution to child development

**Why?** To encourage evaluation and comparison of the greater importance between two kinds of art in child development, develop speaking skills, drill pronunciation and intonation, motivate students to practise in audio recording; make a choice of an image to justify the audio answer

**What?** A web-based application *Voice Thread*

**When?** As a post-reading task in the main part of the class

**How?** After having read the texts students get an assignment to write a 10 sentence answer to the question "Is theatre or cinema more important in child development?" and justify their choice. Then they tablets to get an access to the application and record their voices.

#### Example 3

**Topic** Positive and negative modern cartoon characters

**Why?** To analyze modern animated cartoons, which are broadcasted by Ukrainian television in order to find out positive and negative influence on child development

**What?** An interactive board *Padlet* (<https://padlet.com/solavi771/1299hd3nrvxy>)

**When?** home task that demands some time to search for information in the Internet

**How?** Students get a set of questions to use them as a plan for their home task

*What is the cartoon called?*

*What age category is the cartoon for?*

*What are the characters of the cartoon?*

*What is the cartoon like?*

*Has the plot of the cartoon any educational value?*

*What are the advantages of this cartoon? (2-3 arguments with justifications)*

*What are the disadvantages of it? (2-3 arguments with justifications)*

*Do you recommend children to watch it? Why? / Why not?*

*Do you recommend primary school teachers to use at their lessons? With what aim can teachers use this cartoon?*

Answering these questions students have to choose any cartoon they analyze and summarize it and publish on the board Padlet for every one to see, read and be ready to discuss during the next class.

#### Example 4

**Topic** Computer genius among children

**Why?** To offer students to read appropriate resources, analyze them and choose the most interesting for them

**What?** To create a joint Google Power Point Presentation

([https://docs.google.com/presentation/d/1jdzmY\\_1FXV4fTAIzcl6PYwN-nW2cU9yt74r1uZrKJK/edit#slide=id.p](https://docs.google.com/presentation/d/1jdzmY_1FXV4fTAIzcl6PYwN-nW2cU9yt74r1uZrKJK/edit#slide=id.p))

**When?** As a task for individual work

**How?** Students are offered a list of links to the sites which they need to work at.

<http://www.wonderslist.com/10-genius-child-prodigies-world/>

[https://en.wikipedia.org/wiki/List\\_of\\_child\\_prodigies](https://en.wikipedia.org/wiki/List_of_child_prodigies)

<http://edition.cnn.com/2010/WORLD/europe/05/17/marco.calasan.macedonia/>

<http://www.mirror.co.uk/news/weird-news/child-genius-aged-just-five-4625167>

<http://www.pbs.org/newshour/bb/seeking-tech-genius-among-disadvantaged-teens/>

<http://www.theguardian.com/lifeandstyle/2010/may/15/child-geniuses-prodigies>



[http://news.bbc.co.uk/2/hi/south\\_asia/4032443.stm](http://news.bbc.co.uk/2/hi/south_asia/4032443.stm)

At home they work at the information from the sites, analyze, choose the most important for them, try to shorten and put into one slide only.

It is obvious that doing such activities is impossible if some organizational and pedagogical conditions are not complied such as establishing foreign language environment in the class, technique supply, access to the internet or Wi-Fi connection, providing access to tutorials how to use different web based applications. But if a lecture thinks that such sort of tasks is time consuming, they may offer students to do at home as an individual work. Still there may be different variants of arranging these activities.

**Conclusion.** As you see images are still popular in teaching a foreign language because they are one of the

considerable visual aids in education. They encourage learning and promote forming of foreign language competence. But their use has to bear an innovative nature that can be achieved by integration of media tools in teaching and learning any foreign language. SAMR model may be helpful in the choice of instructions, activities and media tool for teaching a foreign language. Educators should be careful with the choice of pictures and follow the requirements for the picture such as accordance to objectives, students' age, background, experience, education, emotional and intellectual level, professional direction, content of the subject and clear visual perception. And what is more essential that teaching a foreign language through images with the help of media tools realizes the complex the 21<sup>st</sup> century human formation.

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#### Цифровые изображения как медиа и учебные средства в обучении иностранным языкам будущих учителей начальной школы

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**Аннотация.** В статье рассматриваются инновационные аспекты преподавания и обучения иностранным языкам. Она рассматривает изображения как одно из самых популярных наглядных средств и фокусируется на использовании цифровых изображений. Автор определяет цифровые изображения как элемент новых медиасредств (компьютеры, планшеты, смартфоны) и демонстрирует, как их можно использовать с моделью SAMR. В работе представлены некоторые виды деятельности и цифровые ресурсы, которые могут быть использованы для формирования иноязычной коммуникативной компетентности будущих учителей начальной школы.

**Ключевые слова:** новые медиасредства, медиакомпетентность, цифровое изображение, иноязычная коммуникативная компетентность, будущий учитель начальной школы, модель SAMR.